

# End-to-end digital transformation journey



We have been helping customers to complete the most complicated engineering and system integration in manufacturing, utility, and oil and gas industry.

## Who we are

Enverse is a UK based SME providing end-to-end system integration and data analytics solutions. Our services have enabled customers to enhance productivity through more effective use of asset data.



### Industry Experience

Over a combined total of 35 years of experience in the industry in executing industrial and utility digitalisation projects.



### Flexible and Agile

Adapt and work closely with constant project requirements changes with customers for on-time, on-budget project delivery



### Results Driven

We align our goals with customer results. We execute and deliver projects based on customer's KPIs.

## Our Services

### Consultancy

Preparing technical requirements, project management, and conduct feasibility studies. Optimisation and control scenario analysis, CAPEX/OPEX/RoI calculation of DCS/DHS/Renewable energy.

### System Design

Design the right industrial system, selection of the right components, for whole floor digitalisation project

### PLC/IPC Programming

Programme PLCs and IPCs that meet the specific project requirements. We utilise modular off-the-shelf PLCs for ease of integration and expansion.

### System Integration

Integrating multiple moving parts into a distribution control system, with multiple stakeholders and systems. We provide engineering services for PLC-server-cloud integration.



[sales@enverselab.com](mailto:sales@enverselab.com)



[www.enverselab.com](http://www.enverselab.com)



**ENVERSE**

# Our projects

We have executed various different projects across different industrial sectors. These are some key projects to highlight.

## Digital transformation and energy management for airport facilities

### Project Background

Surging energy costs and changing distribution grid regulations makes it difficult for airport to budget and forecast electricity costs. Information is scattered across multiple systems. Human errors resulted in energy wastage.



Izmir Menderes Airport, Türkiye

### Requirements

- Integrate data from multiple systems onto a centralised system
- Propose and provide energy forecasting and energy analytics for the entire airport facility
- Automated climate control of HVAC system using real time environment / flight schedules

### Results

- Reduction of energy consumption due to human errors in operating HVAC systems
- Reduction of energy costs due to better forecasting system
- Consolidation of Scope 2 carbon accounting

## Interface, communication, and control of renewable energy generation on the largest private microgrid network

### Project Background

Distributed energy generation introduces a layer of complexity that makes energy distribution behind the energy meter more complicated. This project manages the integration between multiple energy generation, storage, and test-bedding innovative solutions.



Singapore Institute of Technology, Singapore

### Requirements

- Integrate data from solar power plant, microgrid controller, and battery sources
- Comply to Singapore's national grid regulation to transmit data to Energy Market Authority of Singapore (Power System Operator), passing 99% availability test on per-minute data consistently.
- Provide OPC UA interface and REST API interface.

### Results

- Monitoring and control system compliant with Cybersecurity requirements of Singapore Power and Energy Market Authority of Singapore
- System performance satisfies customer requirements.

